

# **Village of Whispering Pines Whisper Lake/ Hummingbird Pond Management Plan October, 2008**

## **INTRODUCTION:**

In 2007, the Lakes and Watershed Board (LWB) of the Village of Whispering Pines (WP) initiated a planning effort for all its lakes. The purpose of this planning is, in part, to fulfill a component of the WP Land Development Plan. The specific purpose of each lake plan is to ascertain current status of each lake, perceptions of WP residents on lake uses, and identify and prioritize management needs for each lake. The integration of individual lake plans is anticipated to contribute to a Comprehensive Lakes Management Plan, which should form the basis for prioritization of management by the Village.

## **I. STATUS:**

Hummingbird Pond is approx. 2 ½ acre pond located at the southwest end of Whisper Lake that is controlled by a stand-pipe draining into Whisper Lake through an earthen dam. There are three residences on the pond. There is no history of any water testing or fish stocking of HBP. The Village maintenance staff has periodically sprayed herbicides for control of aquatic weeds.

Whisper Lake is a 41 acre lake surrounded by 44 lots, of which 39 have residences. Whisper Lake is impounded by an earthen dam with a concrete weir type spillway draining through a thirty inch concrete pipe system located on the east side of the dam. The dam was repaired in 2003 with a new drainage system and spillway installed. The new spillway was installed 2 inches lower leaving the lake level two inches below its previous level.

A concrete boat ramp is located on the west side of the dam, with boat storage racks located at the ramp to accommodate up to eight boats. Parking in the ramp area is more than adequate. There is no bank fishing area, other than the dam, as all the land around Whisper Lake is owned by the residents.

The shoreline of Whisper Lake is made up of trees and lawns with some docks and retaining walls. Residents have responsibility for maintaining their docks/piers and retaining walls in accordance with Village ordinances.

The maximum depth of Whisper Lake is 21 ft, with most of the deeper water located on the northern end of the lake (dam-side). Average depth is five to six feet at a distance of 50 feet offshore. Residents are allowed to draw water from Whisper Lake for irrigation purposes, with the issuance of required permits.

There has been some siltation in the inlet area resulting from recent construction. The problem has been somewhat repaired, but for long term erosion control, the area needs a containment basin.

Whisper Lake has been assessed as being naturally of low productivity, but water quality is generally indicated to be good. The most recent comprehensive sample was done in July, 2001 (Buck Lakes Assessment Report, Appendix 1) which concluded that Whisper Lake exhibits excellent water quality. Limited water quality data were provided for October, 2004, as a part of the Foster Lake and Pond Management fisheries investigation (Appendix 2), which noted that the water had an olive brown (tannic brown) coloration, but was very clear. As a part of the Lakes and Watershed Board's lake-wide assessment program, a volunteer water quality monitoring program will be implemented in 2009. Initial trial sampling for that program was conducted on Whisper Lake on October 3, 2008 (Appendix 3).

Annual testing for fecal coliform bacteria is performed by the Village. Fecal coliform testing was performed by the village in June 2008. (See appendix 4.) Levels were good.

Aquatic vegetation in Whisper Lake consists primarily of floating heart and watershield--floating leaf plants. Bladderwort and spikerush have been reported as problematic in the past (2001) and have recently reached levels along the shoreline requiring spraying with herbicide. Spot spraying was done in Whisper Lake in 2008. Grass carp have not been stocked in over ten years, though are still present.

Because of its low productivity, fish are not abundant in Whisper Lake. Fish species found in Whisper Lake by the 2004 Foster survey were largemouth bass, bluegills (bream), red ear sunfish (shell crackers), redbreast sunfish, and buffalo

suckers. Anglers also indicate presence of pickerel (southern pike), yellow perch, crappie, and bullhead catfish. No regular assessment of fish status is conducted.

#### Communications:

Communication channels available to address Whisper Lake issues are: TV channel 18, the Village web site, and personal contact with the Lake and Watershed Board's Whisper Lake representative. Use of these communication systems works well.

Village ordinances govern use of water for irrigation, operation of watercraft, codes of conduct and dress, piers and floats, vegetation control, access areas, regulations and safety rules (for watercraft and swimming), fishing, permits, penalties, and maintenance of aquatic ecology. Responsibility for management of the Village lakes rests with the Village Manager, generally upon recommendation of the Lake and Watershed Board made in accordance with the individual lake plan and the comprehensive lake management plan. Whisper Lake interests are brought to the Lakes and Watershed Board by the Whisper Lake representative. Enforcement is via the village police department and the Village Code Enforcement Officer, except as otherwise appropriate.

## **II. PERCEPTIONS:**

Perceptions of the status of Whisper Lake and suggestions for matters of attention were accumulated from a several sources--public forums, the 2006 Citizens Survey of Land Use and Development, the 2007 Village Lakes survey, the Whisper Lake Representative to the Lakes and Watershed Board and other Village officials.

The village lake management questionnaire, administered village-wide in the fall of 2007, resulted in responses from 20 residents who described themselves as living on Whisper Lake, including 3 from Hummingbird Pond. In addition, 10 Village residents who do not live on Whisper Lake chose Whisper Lake as their lake of interest for providing responses to a set of lake-specific questions contained in the questionnaire. Responses to all questions by these residents, along with their written comments, formed the principal basis for the comments which follow.

Most of the respondents to the questionnaire (80%) use Whisper Lake for water-based recreation. Most common uses are fishing (75% of users), boating of some kind, and swimming (44% of users). Respondents answers to issues addressed in the questionnaire were consolidated and organized as follows:

## II.1.Lake Infrastructure

WP residents consider lake infrastructure to be extremely important. Respondents to the 2006 Citizen Survey of Land Development and Use overwhelmingly expressed that it is extremely important for the Village to maintain or improve dams. Respondents also expressed a strong expectation for maintaining and improving access to Village lakes.

### II.1.1. Dam/Spillway

A safe and well-functioning dam and spillway is critical to the life of Whisper Lake and property values of lakefront lots. The village has the responsibility for maintenance of Village dams in accordance with state dam safety regulations, and retains qualified engineers to provide periodic assessments and plans for dam repairs. While the Whisper Lake dam repair project completed in 2003 is considered by lake residents as an improvement, the new spillway has resulted in a normal lake level two inches lower than previously, and has changed the shoreline. The Village needs to develop a solution to the restoration of Whisper Lake to its original level.

### II.1.2. Access

(Note: the following sections reference questions and responses from the 2007 Village Lakes Survey. Where indicated, “ON” refers to Whisper Lake residents; “OFF” refers to non-lake residents who elected to respond to Whisper Lake questions.)

Other than via lakeside residences, access to Whisper Lake is via the boat launch. Access at the launch is considered adequate.

	No Problem → Big Problem					
(5.) Adequacy of parks and access areas	ON	10	6	4	1	0
	OFF	1	1	3	2	1

	Highly Unsatisfactory → Highly Satisfactory				
(17.) Access for boat launching.	0	0	5	12	3

### II.1.3. Docks and Retaining Walls

Docks and retaining walls are a typical amenity for lakefront residents. Whisper Lake residents are satisfied that effective monitoring and control of construction and maintenance activities are used.

- (34.) Construction and maintenance of private docks and bulkheads are effectively monitored and controlled. Strongly Disagree→Strongly Agree  
0 0 4 11 0

A standard bulkhead design should be developed to facilitate bulkhead replacement or new construction. Floating docks of specific standards should be allowed for use when old docks are repaired or replaced.

## II.2. Watershed Activities and Effects

Whisper Lake residents indicated that storm water inflow (35% concerned) and sedimentation (60%) were of concern as factors affecting water quality of Whisper Lake.

### II.2.1. Watershed Disturbance

Whisper Lake residents feel strongly that watershed activities are affecting the lake, and watershed disturbances are not being managed effectively.

- (44.) New construction in the watershed is being effectively supervised in terms of controlling silt and sediment runoff. Strongly Disagree→Strongly Agree  
7 7 7 1 0
- (52.) Storm water run off is not effectively controlled and is harming the lakes 0 3 9 4 6

### II.2.2. Sedimentation

Home building and other construction in the watershed is perceived to have caused sedimentation and murky water.

- (15.) Siltation of cove areas. Highly Unsatisfactory→Highly Satisfactory  
4 6 8 2 0

### II.2.3. Dredging

The dredging equipment recently acquired by the Village should be used to dredge cove where sediments have accumulated.

- (53.) The Village should dredge areas where siltation has occurred. Strongly Disagree→Strongly Agree  
0 0 7 9 5

II.2.4. Water Withdrawals

Residents draw water from Whisper Lake for use on their lots. Management of water withdrawal for residential use is considered adequate.

(51.) Residential irrigation systems drawing from the lakes are managed effectively by the Village. Strongly Disagree → Strongly Agree  
1 2 7 8 7

II.3. Water Quality

Most Whisper Lake residents are concerned about water quality. Although most users of the lake do not consider water quality a problem for Whisper Lake, a significant number of respondents find this issue problematic.

(10.) The WP Land Development and Use survey indicated high importance for maintaining water quality, which is affected by a variety of factors.  
 ( ) I am concerned about lake water quality. 18  
 ( ) I have no concerns about water quality 3  
 in WP lakes.

(1.) Overall water quality. No Problem → Big Problem

ON	1	5	6	3	2
OFF	2	3	1	2	1

II.3.1. Water Clarity

Despite water clarity measures in excess of 5 feet in all studies conducted, some residents consider water clarity unsatisfactory. Comments elsewhere suggest that water clarity reductions in relation to storm water inflow may be temporarily reducing clarity to unsatisfactory levels.

(18.) Water clarity. Highly Unsatisfactory → Highly Satisfactory  
3 7 1 11 0

II.3.2. Pollution sources.

A high proportion of Whisper Lake resident expressed concern about most pollution sources. Although septic system leakage is uncommon, it, along with sedimentation, was indicated of highest concern. Little concern was expressed regarding trash and debris. Most respondents had no opinion of whether septic tank leakage is being adequately monitored.

(11.) If concerned, CHECK all that apply.

( ) Septic tank leakage	13
( ) Lawn runoff [pesticides/herbicides]	11
( ) Fecal coliform levels	11

- ( ) Animal wastes 5
- ( ) Storm water inflows 7
- ( ) Sedimentation 12
- (12.) Then CIRCLE your highest concern:
- ( ) Septic tank leakage 5
- ( ) Sedimentation 4

(13.) Trash and debris in the lakes. Highly Unsatisfactory → Highly Satisfactory  
2 3 2 10 3

(2.) Lake pollution due to faulty/substandard Septic systems No Problem → Big Problem  
ON 5 6 3 2 1  
OFF 1 3 2 1 1

(40.) Monitoring for septic contamination in Village is adequate. Strongly Disagree → Strongly Agree  
2 3 12 2 2

Although runoff from lawns is considered slightly less of concern than other pollution sources, residents feel strongly that use of lawn herbicides should be restricted. People need to be apprised of impacts of lawn chemicals on water quality.

(46.) Use of lawn herbicides near shorelines should be restricted. Strongly Disagree → Strongly Agree  
1 3 8 6 4

(54.) The Village should provide residents with technical information on watershed and lake management “best practices.” Strongly Disagree → Strongly Agree  
0 0 4 10 7

### II.3.3. General Water Quality Monitoring

Whisper Lake residents feel strongly that monitoring programs should be put into place to track water quality status and changes. Results should be made available.

(39.) Periodic monitoring of lake water quality should be conducted. Strongly Disagree → Strongly Agree  
0 0 0 9 13

(43.) The water quality and fishery testing program for our lakes should be formalized and results published. Strongly Disagree → Strongly Agree  
0 0 4 10 5

### II.4. Aquatic Vegetation & Habitat

Although vegetation problems have been reduced since Whisper Lake was drawn down for dam repair in 2003, they are still a significant problem.

(3.) Algae/aquatic weed growth No Problem → Big Problem  
ON 2 6 5 3 4  
OFF 1 2 3 2 1

Highly Unsatisfactory → Highly Satisfactory

(14.) Aquatic weeds. 4 9 0 8 0

Better monitoring of aquatic weeds is needed in Whisper Lake, as is better responses to dealing with the weed problems.

Strongly Disagree → Strongly Agree

(41.) Aquatic vegetation in the lakes is adequately monitored. 2 8 7 3 1  
(45.) Aquatic weeds are being adequately controlled. 3 8 6 3 1

The aquatic weeds of Whisper Lake may be making it attractive to geese, as well as other waterfowl. Residents are equivocal as to waterfowl management adequacy, though there are concerns that management of the resident Canada goose population is inadequate.

Strongly Disagree → Strongly Agree

(47.) The management of the lakes as habitat for waterfowl is adequate. 2 4 5 7 1

### **II. 5. Winter Water Level Drawdown**

Although some residents are unhappy with the lower water level due to change in the dam outlet, most agree that water level management should be conducted for vegetation control, water quality improvement, and maintenance of docks and bulkheads.

Strongly Disagree → Strongly Agree

(49.) Water levels should be drawn down periodically. 3 1 5 6 6

### **II.6. Boating**

Boating in its various forms is an important recreation for Whisper Lake residents.

#### **II.6.1. Regulations**

Most are satisfied with boating regulations, but favor extending hours for boating.

Strongly Disagree → Strongly Agree

(29.) Boating regulations are appropriate as currently written. 0 1 4 15 1  
(30.) Boating regulations are posted where required and are easily understandable. 2 1 8 9 1

The use of electric-only motors should not present a safety concern and therefore after-dark use of watercraft should be allowed.

Strongly Disagree → Strongly Agree

(33.) After-dark use of watercraft should be extended provided that proper safety lights are displayed. 4 2 4 7 5

#### **II.6.2. Boat Registration**

According to ordinance, the lakes of Whispering Pines are intended for the sole use of the residents and their guests. Under ordinance, all boats are required to

have a decal. Whisper Lake residents feel that fees are reasonable. Although presence of boats without a sticker is not perceived to be a problem by most users, they feel strongly that the decal requirement should be strongly enforced.

(32.) Fees for boat decals are reasonable and should be collected. Strongly Disagree → Strongly Agree  
 1 1 2 **14** 4

(9.) Presence of boats without current lake sticker No Problem → Big Problem  
 ON **10** **5** 1 1 0  
 OFF **4** **3** 1 0 0

(31.) Current decals for all watercraft should be stringently enforced by the Village. Strongly Disagree → Strongly Agree  
 0 2 5 **12** 3

## II.7. Fisheries

Fishing was indicated as the most frequent recreational use of Whisper Lake by questionnaire respondents. Despite the low productivity of the lake, residents are generally satisfied with fishing.

(16.) Fishing. Highly Unsatisfactory → Highly Satisfactory  
 0 1 10 **9** 0  
 (24.) Fishing areas (shoreline/parks) 0 1 9 **7** 2

Better monitoring of the fish community is needed in Whisper Lake, as is better response to dealing with the fish management needs. Stocking of fish according to need and plan appropriate to Whisper Lake is strongly favored.

(42.) Status of fish populations is adequately monitored. Strongly Disagree → Strongly Agree  
**1** **7** 11 1 0  
 (43.) The water quality and fishery testing program for our lakes should be formalized and results published. 0 0 4 **10** 8

(48.) The Village should stock the lakes for fishing when needed. Strongly Disagree → Strongly Agree  
 0 3 5 **9** 4  
 (50.) Fish management programs should be tailored to individual lakes. 0 2 2 **14** 4

## II.8. Parks

Whisper Lake has no parks.

## II.9. Swimming

Although Whisper Lake has no specific swimming area, 44% of residents who use the lake for recreation indicate that swimming is one of their uses. Residents are generally satisfied with the swimming areas.

(22.) Swimming areas Unsatisfactory → Highly Satisfactory  
0 3 7 6 2

Users of Whisper Lake do not see a problem with the presence of semi-permanent floats.

(8.) Presence of semi-permanent floats No Problem → Big Problem  
ON 8 7 3 0 0  
OFF 5 2 2 0 0

Residents are not supportive, however, with regards to off-shore anchoring of large inflatable floats. Their survey comments indicate that floats should only be allowed if temporary (1-2 days), and, that when not in use, they should not be allowed on shore. Also, if used, they should be restricted from boating lanes.

(35.) Offshore anchoring of large inflatable floats should be allowed. Strongly Disagree → Strongly Agree  
5 6 4 5 0  
(36.) If so, floats should be restricted in size. 0 3 4 5 4  
(37.) If allowed, distance offshore should be restricted. 0 3 1 5 6

## II.10. Enforcement

Whisper Lake users do not consider enforcement of ordinances to be problematic. Some concern about non-residents from outside Whispering Pines exists, and some sympathy exists for developing a system for easily identifying vehicles of residents (e.g., car stickers) to prevent non-residents from illegally using lake facilities.

(4.) Enforcement of current lake ordinances No Problem → Big Problem  
ON 7 6 6 0 0  
OFF 2 3 3 0 0

(57.) Village lakes are adequately patrolled and regulations enforced. Strongly Disagree → Strongly Agree  
2 5 11 3 1

## II. 11. Communication

Effective communication is essential at many levels. Residents felt strongly that more information should be made available to them.

(43.) The water quality and fishery testing program for our lakes Strongly Disagree → Strongly Agree  
0 0 4 10 8  
should be formalized and results published.  
(54.) The Village should provide residents with technical information 0 0 4 10 7  
on watershed and lake management “best practices.”

## II.12. General Satisfaction with Lake Management

Although the majority of users of Whisper Lake feel that the lake hasn't changed much in recent years, more felt that it has declined than improved.

(10.) Over the past *five years*, would you say the overall quality of this lake is: (check one)

	Getting better	About the same	Getting worse
ON	2	12	7
OFF	1	7	2

All Whisper Lake respondents feel that lake management is important to quality of life in Whispering Pines. However, they were equivocal on their satisfaction with the management of our lakes.

(56.) Effective management of Village lakes is important to maintaining a high quality of life for Village residents. Strongly Disagree → Strongly Agree  
 0 0 0 **8** **14**

(58.) Overall, I am satisfied with the current management of Village lakes. Strongly Disagree → Strongly Agree  
 1 7 3 9 1  
 (55.) The overall quality of the Village lakes is adequately maintained. 2 7 5 7 1

## III. WHISPER LAKE ACTION PLAN

Significant numbers of Whisper Lake residents and users are less than satisfied with the status of Whisper Lake, its management, and communication regarding lake activities. This plan seeks to identify and prioritize objectives to better address these concerns.

Goal 1. To maintain and enhance the esthetic values and recreational opportunities of Whisper Lake.

Objectives:

1. Modify outlet structure on dam to bring water level back up to previous level.

Action: Priority: High  
 Cost: Med to Low

Timeline: Short

Responsibility: Village Manager, Whisper Lake rep

Comment: Spillway height should be raised two inches to original level. It is possible that this could be accomplished in conjunction with the emplacement of a grate across the spillway to prevent children from accidentally falling into the spillway. A grating with a two inch 'lip' might solve both the safety and the lake level issue.

2. Strictly enforce all ordinances, especially on watershed disturbances by construction/development activities and non-resident use of lakes.

Action: Priority: High

Cost: Low

Timeline: Ongoing

Responsibility: Village enforcement officials and Lakes and

Watershed Board

Comment: The LWB proposed, council approved ordinance regarding soil erosion and control is a significant step in satisfying this objective.

3. Dredge coves where excessive sedimentation has occurred.

Action: Priority: Medium

Cost: Medium to High

Timeline: Long

Responsibility: Village, Lakes and Watershed Board

Comment: Whisper Lake's dredging needs are limited to one cove area and one inlet area. Compared with other Village dredging requirements, these are not major dredging projects, but nevertheless, necessary ones. Use of the Village mini-dredge would minimize the cost of the effort, though finding suitable methods and sites for the disposition of the spoil will may be difficult.

4. Draw down water levels periodically for vegetation control, fish management, water quality, and waterfront repairs.

Action: Priority: Medium

Cost: Low

Timeline: Short

Responsibility: Village, Whisper Lake Rep

Comment: Another drawdown of Whisper Lake should be planned for 2009-2010. The lake was last drawn down in 2003-2004, in conjunction with the dam repair. In order to maximize the advantage of the drawdown, particularly to make repairs to docks and bulkheads, all lake residents should be contacted well before going ahead with the drawdown. (Note: The lake took 18 months to return to a full level after the last drawdown.)

5. Amend the Village ordinance to allow after-dark use of watercraft.

Action:      Priority: Medium  
                 Cost: Low  
                 Timeline: Short  
                 Responsibility: Village, Lakes and Watershed Board

Comment: After dark use of watercraft should be extended provided that proper safety lights are displayed.

6. Conduct fish management specifically appropriate for Whisper Lake based on fish assessment results.

Action:      Priority: Medium  
                 Cost: Medium  
                 Timeline: Long  
                 Responsibility: Village, Lakes and Watershed Board,  
   Whisper Lake Rep

Comment: A fish survey was last done on Whisper Lake October 2004. Residents have little knowledge of the present fish population or condition of the fish. An outside contractor will need to survey the lake to collect this information. Once the assessment is accomplished, stocking and habitat solutions appropriate to Whisper Lake can be applied.

Goal 2. Base lake management policies and procedures on a thorough and reliable data base.

Objectives:

1. Institute the Lakes and Watershed Board water quality monitoring program for Whisper Lake.

Action: Priority: High  
Cost: Low  
Timeline: Short  
Responsibility: Lakes and Watershed Board and Whisper  
Lake Rep

Comment: A water quality testing system was instituted in Oct. 2008. This will be an on going program. The Whisper Lake Rep shall perform the testing and reporting.

2. Monitor/control aquatic vegetation.

Action: Priority: Medium  
Cost: Medium  
Timeline: Seasonal  
Responsibility: Village, Whisper Lake Rep

Comment: A drawdown during the winter months would likely assist in keeping most weeds under control along the shoreline, though care will need to be exercised to preserve a necessary level of fish habitat.

3. Monitor fish community status.

Action: Priority: Medium  
Cost: Medium  
Timeline: Ongoing  
Responsibility: Village, Lakes and Watershed Board

Comment: The village should plan periodic surveys, using an outside contractor, to analyze the fish program. These surveys should be accomplished every five years - the last survey was done in Oct. 2004.

Goal 3. To effectively communicate needs and actions (among residents, lake representative, Lakes and Watershed Board, and the Village)

Objectives:

1. Use all available means, such as the Village web page, channel 18, the Pitch, the village topics, and bulletin boards located at the boat ramp areas, to communicate lake information of interest to residents and users.

Action: Priority: High  
Cost: Low  
Timeline: Short  
Responsibility: Lakes and Watershed Board, Lake Rep

Comment: Specifically, provide residents with information on best management practices for use of residential chemicals (herbicides, pesticides, fertilizers.)

2. Publish the results of water quality and fish surveys.

Action: Priority: High  
Cost: Low  
Timeline: Short  
Responsibility: Lakes and Watershed Board, Lake Rep

Appendix 1. Water quality data provided by Buck Engineering taken July, 2001.

Trophic State: Oligotrophic (low productivity)  
Average Surface Conditions: (mg/l)  
Total N: <0.05    NH3: <0.05    NO2+NO3: <0.05  
Total KN: <0.50    TotalP: <0.02    PO4: <0.01  
Total DS: 20    Total SS: <5.0  
pH: 6.5    Sp. Conductivity: 30 *umhos*    Chl. a: 2.0 *ug/l*  
Alkalinity: (taken, not reported)  
Water Clarity: 7.2 ft    Stratification Depth: 13 ft

---

---

Appendix 2. Water quality results reported in the Foster Lake and Pond Management report taken October, 2004.

Hardness 30PPM  
Alkalinity 16 PPM  
pH 6.5  
Visibility >36 inches.

---

---

Appendix 3. Water quality results taken in initial Lakes and Watershed Board sampling, October 3, 2008.

Water Clarity: 5.5 ft  
pH: 5,5-7.0  
NO2 0

---

---

Appendix 4. Fecal Coliform Testing by Village Maintenance Department June 2008

2 col/100 ml LRL2